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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,870	07/03/2003	Willem Johannes Van Straaten	6502-1024	4169

466 7590 10/17/2005

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EXAMINER

MATHEW, FENN C

ART UNIT	PAPER NUMBER
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3764

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/611,870	Applicant(s) VAN STRAATEN ET AL.	
	Examiner Fenn C. Mathew	Art Unit 3764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

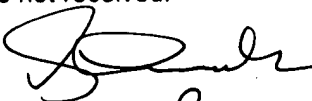
Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


Primary

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/03/03 12/17/03</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Wilmarth (U.S. 4,397,462). As broadly claimed by the Applicant, Wilmarth discloses a resistance assembly including an elongate first cylinder (26) having a first cross-sectional area, the interior of the first cylinder being pressurized with a gas, an elongate member (25) having a first end and a second end, the elongate member extending partly into the interior of the first cylinder with the first end inside the first cylinder, and the second end outside the first cylinder, the elongate member being mounted for reciprocating movement in its longitudinal direction, relatively to the first cylinder, the elongate member upon being moved by a distance l , into the interior of the first cylinder displaces a volume of gas which is given by the expression $l \times a$ where a is a second cross sectional area (as best understood) which is smaller than the first cross sectional area, and a portion connected to the elongated member comprising an actuating means (13, 14, 23). Referring to claim 2, Wilmarth teaches an apparatus (32) for pressurizing the interior of the first cylinder with gas.

3. Claims 1, 3, 5-6, and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Chen (U.S. 6,827,673). Referring to claim 1, Chen discloses a resistance assembly

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including an elongate first cylinder (40) having a first cross-sectional area, the interior of the first cylinder being pressurized with a gas, an elongate member (41) having a first end and a second end, the elongate member extending partly into the interior of the first cylinder with the first end inside the first cylinder, and the second end outside the first cylinder, the elongate member being mounted for reciprocating movement in its longitudinal direction, relatively to the first cylinder, the elongate member upon being moved by a distance l , into the interior of the first cylinder displaces a volume of gas which is given by the expression $l \times a$ where a is a second cross sectional area (as best understood) which is smaller than the first cross sectional area, and a portion connected to the elongated member comprising an actuating means (26). Referring to claim 3, Chen teaches a hollow elongate member having an open end and a sealed end. Referring to claims 5-6, Chen teaches a portion of the elongated member (piston) having cross sectional area equal to the second cross sectional area, wherein the piston is solid. Referring to claim 10, Chen teaches an embodiment in figure 11a wherein the device includes a second cylinder (82) through which at least part of the interior of the first cylinder (40), with the elongate member (84) extending into the second cylinder, and a piston (85) in contact with the inner surface of the second cylinder.

4. Claims 1, and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Resk (U.S. 4,951,941). Referring to claim 1, Resk discloses a resistance assembly including an elongate first cylinder (30) having a first cross-sectional area, the interior of the first cylinder being pressurized with a gas, an elongate member (40) having a first end and a second end, the elongate member extending partly into the interior of the first

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cylinder with the first end inside the first cylinder, and the second end outside the first cylinder, the elongate member being mounted for reciprocating movement in its longitudinal direction, relatively to the first cylinder, the elongate member upon being moved by a distance l , into the interior of the first cylinder displaces a volume of gas which is given by the expression $l \times a$ where a is a second cross sectional area (as best understood) which is smaller than the first cross sectional area, and a portion connected to the elongated member comprising an actuating means (18). Referring to claims 7-9, Resk teaches a piston head (46), with inner and outer sides, fixed to the first end of the elongate member and engages with the internal surface of the first cylinder, wherein within the interior of the first cylinder, the pressure of the gas on the inner side of the piston head is the same as the pressure of the gas on the outer side, due to equalizing holes that inherently define a passage (column 3, lines 38-43).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen alone. Chen teaches the claimed invention except for specific ratios and sizes of cross-sectional area. Absent criticality, the specific choice of sizes or relationship

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between sizes would have been obvious to one of ordinary skill absent unexpected or undesired results.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fenn C. Mathew whose telephone number is (571) 272-4978. The examiner can normally be reached on Monday - Friday 9:00am - 5:30pm.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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October 12, 2005


Primary